

REMARKS

Claims 21-43 are pending in the current application. Claims 21, and 39-43 have been amended hereby.

The Examiner has rejected claims 21-43 under 35 U.S.C. § 103(a) as being unpatentable over Japan 3-110734 in view of Corcoran (U.S. 6,081,177)¹.

The Examiner equates the structure identified by reference numerals 60a, 80 in JP 3-110734 as corresponding to a coupling element providing a mechanical connection between the contact banks, wherein the contact banks lie in mirror image symmetry relative to the coupling element. It is first noted that the disclosure of JP 3-110734 is also found in corresponding U.S. Patent No. 5,103,199 issued to Ootsuka. As is clear from Ootsuka '199, the element 60a referred to by the Examiner (cf. reference numeral 600 in Figures 7-9 in Ootsuka '199, with reference numeral 60a in Figures 4-6 in JP 3-110734) is an interlock pin slidably positioned between two electromagnetic contactors such that when one of the contactors is energized, the interlock pin is moved into a position to prevent the simultaneous closure of the second electromagnetic contactor. See, e.g., U.S. 5,103,199, col. 1, line 40 to col. 2, line 20. The second structure referred to by the Examiner, i.e., element 80, is a cover plate attached to the two electromagnetic contactors to fix the predetermined interval between them. See, e.g., U.S. 5,103,199, col. 1, lines 33-38. Neither element 60a, 80 of JP 3-110734 either corresponds to or suggests the coupling element called for in claims 21-38, 39, 40-41 or 42-43 of the present application.

As amended, claim 21, and claims 22-38 which depend therefrom, calls for a relay with a coupling element that includes, *inter alia*, a first spring bracket, a first plurality of contact spring pairs, each of the first plurality of contact spring pairs including an active contact spring disposed on the first spring bracket which cooperates with a passive contact spring positioned on the coupling element and wherein the relay is mechanically connectable with at least one further relay wherein the coupling element provides the mechanical connection between the respective relays and wherein the passive contact springs of the first plurality of contact spring pairs are aligned with the passive contact springs of a second plurality of contact spring pairs defined by the further relay, each passive contact spring of

¹ The Examiner refers to "Corcoran [U.S. 6,081,177]" in the September 10, 2003 Office Action, however, U.S. Patent No. 6,081,177 issued to Fausch while U.S. Patent No. 5,805,040 issued to Corcoran.

the first plurality of contact spring pairs positioned on the coupling element opposite one of the passive contact springs of the second plurality of contact spring pairs wherein the coupled relays lie in mirror-image symmetry relative to the coupling element.

None of the cited references, i.e., JP 3-110734, U.S. 5,805,040 or U.S. 6,081,177, either disclose or suggest, alone or in combination any such coupling element that both provides for the mechanical coupling of two relays and wherein aligned passive contact springs are oppositely positioned on the coupling element to thereby position the coupled relays in mirror image symmetry. Thus, claims 21-38 are patentably distinct over the cited references and the allowance of claims 21-38 is respectfully requested.

With regard to amended claim 39 it is noted that this claim calls for a relay assembly with a coupling element which includes, *inter alia*, at least two relays each having at least one spring bracket, a plurality of contact spring pairs associated with each relay, each of the plurality of contact spring pairs including an active contact spring disposed on the spring bracket of one of the relays and a passive contact spring positioned on the coupling element and wherein the coupling element provides the mechanical connection between the respective relays and each of the passive contact springs of the plurality of contact spring pairs of one relay is aligned with and positioned on the coupling element opposite one of the passive contact springs of the plurality of contact spring pairs of the other relay wherein the at least two coupled relays lie in mirror-image symmetry relative to the coupling element and wherein the coupling element is releasably coupled.

None of the cited references, i.e., JP 3-110734, U.S. 5,805,040 or U.S. 6,081,177, either disclose or suggest, alone or in combination any such coupling element that both provides for the mechanical coupling of two relays and wherein aligned passive contact springs are oppositely positioned on the coupling element to thereby position the coupled relays in mirror image symmetry and wherein the coupling element is releasably coupled. Thus, claim 39 is patentably distinct over the cited references and the allowance of claim 39 is respectfully requested.

With regard to amended claim 40, and claim 41 which depends therefrom, it is noted that this claim calls for a relay assembly with a coupling element that includes, *inter alia*, at least two relays each having at least one spring bracket, a plurality of contact spring pairs associated with each relay, each of the plurality of contact spring pairs including an active contact spring disposed on the spring bracket of one of the relays and a passive contact spring

positioned on the coupling element wherein each of the passive contact springs of the plurality of contact spring pairs of one relay is aligned with and positioned on the coupling element opposite one of the passive contact springs of the plurality of contact spring pairs of the other relay wherein the at least two coupled relays lie in mirror-image symmetry relative to the coupling element and wherein the plurality of contact spring pairs of each of the at least two relays are also electrically coupled with one another across the coupling element.

None of the cited references, i.e., JP 3-110734, U.S. 5,805,040 or U.S. 6,081,177, either disclose or suggest, alone or in combination any such coupling element wherein aligned passive contact springs are oppositely positioned on the coupling element to thereby position the coupled relays in mirror image symmetry and wherein the plurality of contact spring pairs of each of the at least two relays are also electrically coupled with one another across the coupling element. Thus, claims 40 and 41 are patentably distinct over the cited references and the allowance of claims 40 and 41 is respectfully requested.

With regard to amended claim 42, and claim 43 which depends therefrom, this claim calls for a relay with a coupling element that includes, *inter alia*, a first spring bracket, a first plurality of contact spring pairs, each of the first plurality of contact spring pairs including an active contact spring disposed on the first spring bracket which cooperates with a passive contact spring positioned on the coupling element and wherein the relay is mechanically couplable with at least one further relay and each of the passive contact springs of the first plurality of contact spring pairs are aligned with a passive contact spring of a second plurality of contact spring pairs defined by the further relay, each passive contact spring of the first plurality of contact spring pairs positioned on the coupling element opposite one of the passive contact springs of the second plurality of contact spring pairs wherein the coupled relays lie in mirror-image symmetry relative to the coupling element and wherein the coupling element includes at least one groove and at least one multiple contact spring slidably mounted in the groove, the multiple contact spring comprising and electrically coupling one of the passive contact springs of the first plurality of contact spring pairs and an aligned one of the passive contact springs of the second plurality of contact spring pairs.

None of the cited references, i.e., JP 3-110734, U.S. 5,805,040 or U.S. 6,081,177, either disclose or suggest, alone or in combination any such coupling element wherein aligned passive contact springs are oppositely positioned on the coupling element to thereby position the coupled relays in mirror image symmetry and wherein the coupling element

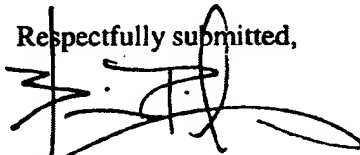
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includes at least one groove and at least one multiple contact spring slidably mounted in the groove, the multiple contact spring both forming and electrically coupling one of the passive contact springs of the first plurality of contact spring pairs and an aligned one of the passive contact springs of the second plurality of contact spring pairs. Thus, claims 42 and 43 are patentably distinct over the cited references and the allowance of claims 42 and 43 is respectfully requested.

In the event Applicant has overlooked the need for any extension of time or payment of fee, Applicant hereby petitions therefor and authorizes that any charges be made to Deposit Account No. 02-0385, Baker & Daniels. Should the Examiner have any further questions regarding any of the foregoing, the Examiner is respectfully invited to telephone the undersigned at (260) 424-8000.

Applicant respectfully requests that a timely Notice of Allowance be issued in this application.

Respectfully submitted,



Brian C. Pauls
Registration No. 40,122

Attorney for Applicant

BCP:sm

BAKER & DANIELS
111 East Wayne Street, Suite 800
Fort Wayne, IN 46802
Telephone: 260-424-8000
Facsimile: 260-460-1700

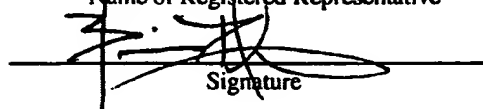
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I HEREBY CERTIFY THAT THIS correspondence is being deposited with the United States Postal Service as First Class Mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on: January 12, 2004.

BRIAN C. PAULS, REG. NO. 40,122

Name of Registered Representative



Signature

January 12, 2004

Date